



In response to the Official Action, please consider the following amendment and remarks.

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IN THE CLAIMS:

Please amend claim 2 as follows:

a' 2. (Amended) The apparatus of claim 1 wherein said remote system includes a remote telephone interconnected to [a] the telephone interconnection of said remote modem.

REMARKS

In the Office Action dated July 20, 1999, claims 1-4 were rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Number 5,604,737 to Iwami et al in view of United States Patent Number 5,867,494 to Krishnaswamy. Claims 1-4 were also rejected under 35 U.S.C. §103(a) as being unpatentable over PCT WO 97/23078 to Huang et al in view of United States Patent Number 5,610,910 to Focsaneanu. The Examiner objected to claim 2. The applicants assert amended claim 2 overcomes the Examiner's objection and respectfully traverse the rejections of claims 1-4. Because claims 5-18 were added and claim 3 was cancelled in a preliminary amendment dated September 5, 1997, claims 1-2 and 4-18 are now pending in the application. Although the Examiner only issued rejections to claims 1-4, for purposes of this response Applicant assumes that the rejections are applicable to claims 1-2 and 4-18. The Applicant respectfully requests that the Examiner acknowledge, in the next office action, receipt of the Preliminary Amendment dated September 5, 1997.

In regard to the rejections of claims 1-4 under 35 U.S.C. §103(a) over Iwami in view of Krishnaswamy, the Examiner asserted that Iwami discloses a converter, an interface machine, and a second sound processing mechanism as claimed in the present invention. The Examiner acknowledged that Iwami does not disclose nor suggest "a public network communication

controller including a remote modem configured in remote system and receiving telephone transmission signals.”

It should be appreciated that the voice communication system of Iwami is very different from the applicants’ apparatus and method for effecting audible communication between a local system and a remote system over a WAN. Iwami essentially is an interface between a telephone network and a packet switching network. Iwami enables voice communication over telephone networks and packet switching networks so communication terminals connected to a packet switching network can perform voice communication with a standard telephone and vice versa. Therefore, as stated in Iwami (see e.g. independent claims 1, 5, 10, 19, 20, and 21), Iwami must include both “a line switching network to which telephones are connected” and “a packet switching network to which communication terminals are connected.

Also, disclosed and claimed, Iwami must include a communication server. Claim 1 of Iwami states the communication server “receives voice information transmitted from said one telephone through said line switching network, edits said voice information into packets, and transmits the packets to said communication terminal through said packet switching network, while receiving packets transmitted from said communication terminal through said packet switching network, and transmitting said voice information in the packets to said one telephone through said line switching network to carry out a communication between said telephone and said communication terminal through said communication server.” Similar language is found in the Iwami specification and in claims 5, 10, 19, 20, and 21. The communication server is the bridge between the telephone network and the packet switching network.

In contrast to Iwami, the present invention discloses and claims an apparatus and method that allows a remote modem to transmit a signal over a wide area network (WAN) that can be heard at a local site. The present invention comprises a remote modem, a converter, an interface machine, and a second processing machine. Typically, the remote modem is located a significant distance away from the local site. The present invention enables a person at the local site to listen to an exchange of signals between the remote modem and the local computer over a WAN.

As the title of the present invention -“Audible Communication with a Modem Over a Wide Area Network”- implies, the communication between the remote modem and the local site is carried out over a WAN. The communication is not carried out over a line switching network via a communication server. As stated in Claim 1, the present invention includes “an interface machine receiving said audio output signal from said converter, said interface machine including a first sound processing mechanism processing said audio output signal for transmission over said WAN as a network audio signal.” As disclosed and claimed, Applicant’s first sound processing mechanism comprises a simple sound card running an audio streaming program.

In the Office Action, the Examiner stated that the converter in the present invention is the same as “a public network communication controller” in Iwami. Considering the “public network communication controller” transmits information over a telephone network to a telephone, the “public network communication controller” and the converter are different elements. Further, because the present invention is not concerned with Internet telephony, unlike Iwami, there is no need to carry voice communication over a line switching network.

Accordingly, the applicant’s invention, in stark contrast to Iwami, provides an apparatus and method for effecting audible communication between a local system and a remote system over a WAN. Iwami does not enable a person at a local site to listen to an exchange of signals between a remote modem and a local computer over a WAN.

Given the deficiencies of Iwami, a combination of Iwami and Krishnaswamy does not encompass the present invention as the Examiner alleged in the Office Action. Even if Krishnaswamy discloses a “remote modem configured in a remote system and receiving telephone transmission signals and interconnected to a telephone line interface” as the Examiner alleged, a combination of Iwami and Krishnaswamy does not provide an apparatus and method that enables a person at a local site to listen to an exchange of signals between a remote modem and a local computer over a WAN. Because neither Iwami nor Krishnaswamy, alone or in combination, disclose or suggest applicants’ invention as recited in claim 1, claim 1 and claims 2 and 4 dependent therefrom, are allowable over the cited prior art as well as pending new claims 5-18.

In regard to the rejections of claims 1-4 under 35 U.S.C. §103(a) over Huang in view of Focsaneanu, the Examiner asserted that Huang discloses a converter, an interface machine, and a second sound processing mechanism as claimed in the present invention. The Examiner acknowledged that Huang does not disclose nor suggest “a remote modem is a hardware which configured in remote system and receiving telephone transmission signals and interconnected to telephone line interface.”

It should be appreciated that the telecommunication system of Huang comprising both circuit switched and packet switched networks is very different from the applicants' apparatus and method for effecting audible communication between a local system and a remote system over a WAN. Huang discloses “a hybrid packet switched and circuit switched telephony system that routes a telephone call mostly through packet switched networks, except for the caller and callee ends where the subscriber telephone sets are directly connected to the circuit switched networks of the respective local exchange carriers.” As stated in independent claims 1, 11, 21, and 22, Huang must include a circuit switched network for providing signals consistent with voice input or voice output.

In contrast to Huang, the present invention discloses an apparatus and method that allows a remote modem to transmit a signal over a wide area network (WAN) that can be heard at a local site. The present invention comprises a remote modem, a converter, an interface machine, and a second processing machine. Typically, the remote modem is located a significant distance away from the local site. The present invention enables a person at the local site to listen to an exchange of signals between the remote modem and the local computer over a WAN.

The communication between the remote modem and the local site is carried out over a WAN. The communication is not carried out over a line switching network. As stated in Claim 1, the present invention includes “an interface machine receiving said audio output signal from said converter, said interface machine including a first sound processing mechanism processing said audio output signal for transmission over said WAN as a network audio signal.” As

disclosed and claimed, Applicant's first sound processing mechanism comprises a simple sound card running an audio streaming program.

Accordingly, the applicant's invention, in stark contrast to Huang, provides an apparatus and method for effecting simple audible communication between a local system and a remote system over a WAN. Further, Huang does not enable a person at a local site to listen to an exchange of signals between a remote modem and a local computer over a WAN.

Given the deficiencies of Huang, a combination of Huang and Focsaneanu does not encompass the present invention as the Examiner alleged in the Office Action. Even if Focsaneanu discloses a "remote modem configured in a remote system and receiving telephone transmission signals and interconnected to a telephone line interface" as the Examiner alleged, a combination of Huang and Focsaneanu does not provide an apparatus and method that enables a person at a local site to listen to an exchange of signals between a remote modem and a local computer simply over a WAN. Because neither Huang nor Focsaneanu, alone or in combination, disclose or suggest applicants' invention as recited in claim 1, claim 1, and claims 2 and 4 dependent therefrom, are allowable over the cited prior art as well as pending new claims 5-18.

In the Office Action, Claim 2 was objected to. Claim 2 has been amended to overcome the Examiner's objection.

In view of the amendment and remarks provided herein, applicants submit that the present application is in condition for allowance. Accordingly, expeditious reconsideration and

allowance are respectfully requested. The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Respectfully submitted,



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